

ABSTRACT

Influence from an adjacent signal is prevented even if a guard band is not provided.

5 A phase comparison unit 21 compares a reference window signal input to a PLL circuit 4 and a window signal supplied from a frequency division circuit 22 and outputs the comparison result to an LPF 23. The LPF 23 extracts a low frequency component from the input signal
10 and outputs the same to a voltage controlled oscillator 24. The signal output from the voltage controlled oscillator 24 is supplied as a clock to units of an OFDM modulation circuit 2 and, at the same time, supplied to the frequency division circuit 22. The frequency division
15 circuit 22 divides the frequency of the supplied signal to thereby generate a new window signal and supplies the same to an IFFT unit 13. Further, the generated window signal is supplied to a PLL circuit 5. The PLL circuit 5 generates a clock for controlling a frequency modulation
20 circuit 3 based on the supplied window signal.